

## Current major event

### Meningococcal Disease in Sudan Continues in declining trend

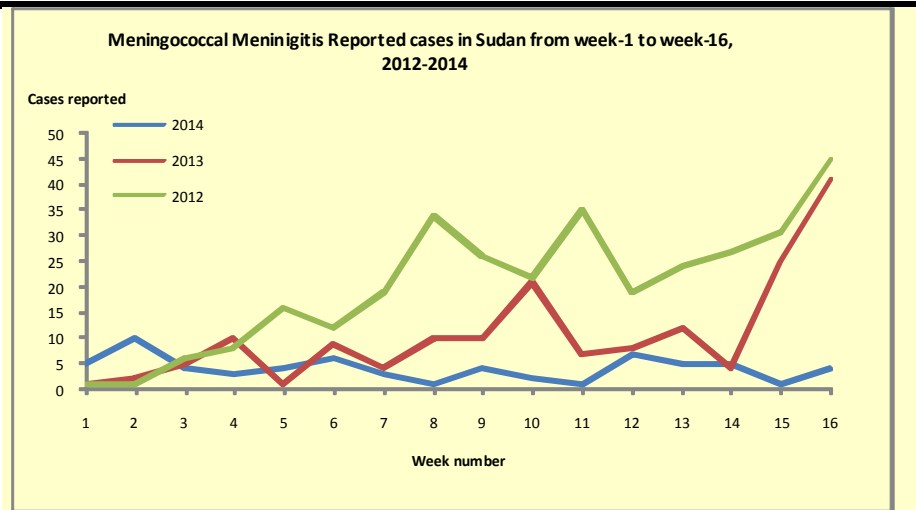
During the current dry season Sudan reported 69 suspected cases of meningococcal meningitis with no death reported. So far, *Neisseria Meningitidis* of any type especially type A, have not been confirmed. The reported cases are distributed sporadically in some of the 494 sectors in the 18 States of the Country. None of the sectors has reached alert or epidemic threshold levels.

### Editorial note

The first major outbreak of meningitis in the African meningitis belt was reported between 1949 to 1951 from 4 countries including Sudan. Over 250,000 cases were reported that time. Ever since then, similar major outbreaks occurred in waves, with 8 to 12 years in between. Sudan reported major epidemics of meningitis in 1979, 1989 and 1999. Over 30000 cases were reported during each of these outbreaks. More than 80% of the these epidemics were due to *Neisseria meningitidis* sero-group A.

In the last three years, Sudan witnessed a steady decline in the number of cases of meningitis reported nationwide. Total cases reported during the first 16 weeks of 2012, 2013 and 2014 were 326, 170 and 69 respectively (see the graph below).

The decrease in the number of cases during the period under review coincides with the progressive introduction of the newly developed Meningococcal A conjugate vaccine in the country since 2012. Mass preventive Conjugate-A vaccination campaigns (MenAfriVac) were successfully implemented all over Sudan in 2013. More than 24,823,640 of Sudan's population, in the age group 1 to 29 years old were vaccinated. This trend has also been observed in the remaining countries that have implemented the preventive campaigns. No single case of sero-group A meningitis has been reported. Since 2010, a total number of 153 million of the target population in the meningitis belt has been vaccinated



### Meningitis cases and deaths reported from Sudan, 2006– week16 2014:

Year	Cases	Deaths	CFR %
2006	2617	91	3
2007	2297	115	5
2008	296	12	4
2009	1476	53	4
2010	2011	84	4
2011	754	19	3
2012	911	26	3
2013	1110	49	4
2014	69	0	0

with MenAfriVac.

The reduction in the cases of meningitis in Sudan is a great achievement realized within a short time since the introduction of MenAfriVac. The vaccine is expected to stimulate long-lasting immunity and to produce herd immunity. However, Sudan should continue to monitor the epidemiological situation during the dry season in the country.

It is feared that in the absence of Meningitis sero-group A, another sero-group (e.g. W135) may take over and cause major outbreaks in the future. Meningitis W135 has already caused outbreaks in some sectors in Darfur and Kurdufan States since 2005. It is feared that, this sero-group together with meningitis sero-group X will play a significant roles in causing meningitis outbreaks in the coming years as has been observed in Burkina Faso during 2012 season. Efforts to accelerate the development of a new conjugate vaccine that includes *Neisseria* s/groups W135 and X will give more benefits to the region.

### Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia, Jordan, Egypt and Yemen

### Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

#### Avian Influenza A (H5N1): 2003-2014

Egypt	[175 (63), 36%]
Indonesia	[195 (163), 83.6 %]
Viet Nam	[126 (63), 50%]

#### MERS-CoV: 2012-2014

Saudi Arabia	[449 (121), 26.9%]
Jordan	[6 (3), 50%]
Oman	[2 (2), 100%]
UAE	[53 (8), 15.1%]
Kuwait	[3 (1), 33.3%]
Tunisia	[3 (1), 33.3%]
Qatar	[7 (4), 57.1%]
Yemen	[1 (1), 100%]
Egypt	[1 (0), 0%]

#### Ebola Hemorrhagic Fever:

Guinea	[231 (155), 67%]
Liberia	[35 (11), 31.4%]

#### Wild poliovirus: 2013-2014

Pakistan	[142 (0), 0%]
Afghanistan	[17 (0), 0%]
Syria	[36 (0), 0%]
Somalia	[194(0), 0%]
Iraq	[1 (0), 0%]

CFR=Case-Fatality Rate; # Suspected cases